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GATA5 Rabbit pAb

Catalog # AP100261

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BWX5
Other Accession	Q9BWX5
Reactivity	Rat
Predicted	Pig, Human, Mouse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41299
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GATA-5
Epitope Specificity	161-260/397
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 2 GATA-type zinc fingers.
DISEASE	Note=Rare variants in GATA5 may be a cause of susceptibility to atrial fibrillation, a common sustained cardiac rhythm disturbance. Atrial fibrillation is characterized by disorganized atrial electrical activity and ineffective atrial contraction promoting blood stasis in the atria and reduces ventricular filling. It can result in palpitations, syncope, thromboembolic stroke, and congestive heart failure.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Members of the GATA family share a conserved zinc finger DNA-binding domain and are capable of binding the WGATAR consensus sequence. GATA-1 is erythroid-specific and is responsible for the regulated transcription of erythroid genes. It is an essential component in the generation of the erythroid lineage. GATA-2 is expressed in embryonic brain and liver, HeLa and endothelial cells, as well as in erythroid cells. Studies with a modified GATA consensus sequence, AGATCTTA, have shown that GATA-2 and GATA-3 recognize this mutated consensus while GATA-1 has poor recognition of this sequence. This indicates broader regulatory capabilities of GATA-2 and GATA-3 than GATA-1. GATA-3 is highly expressed in T lymphocytes. GATA-4, GATA-5 and GATA-6 comprise a subfamily of transcription factors. Both GATA-4 and GATA-6 are found in heart, pancreas and ovary; lung and liver tissues exhibit GATA-6, but not GATA-4 expression. GATA-5 expression has been observed in differentiated heart and gut tissues and is present throughout the course of development in the heart. Although expression patterns of the various GATA transcription factors may overlap, it is not yet apparent how the GATA factors are able to discriminate in binding their appropriate target sites.

Additional Information

Gene ID	140628
Other Names	CHTD5; GATAS; bB379O24.1; GATA5_HUMAN; GATA5; GATA-binding factor 5; GATA5_MOUSE; Q5U2V0_RAT; GATA binding protein 5; GATA-binding protein 5
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GATA5 (HGNC:15802)
Function	Transcription factor required during cardiovascular development (PubMed:23289003). Plays an important role in the transcriptional program(s) that underlies smooth muscle cell diversity (By similarity). Binds to the functionally important CEF-1 nuclear protein binding site in the cardiac-specific slow/cardiac troponin C transcriptional enhancer (PubMed:25543888).
Cellular Location	Nucleus.

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